

Training

Annual Meeting

Out brief

- we have concerns about neutralization tank
 - o continuous monitoring would be best
- concerns about tank farm dropping. Hard poppy?
- Carryover from Weyer
- effluent area
- foaming from tank.
- stormwater flowing to lagoons

GNH v PCA 12/16/13

City of New Haven on the way.

Crews that responded to 550 addresses to ~~not~~ take us to the site at the incident.

9 ~~Direct~~ members of board of directors - elected.

29 - OMI - O&M

11 - Syngro - maintenance

CH2M Hill / OMI contract w/
East Haven Hamden Woodbridge.

Pre-treatment crews - w/ FOG.
Issue permits to industrial users.

CH2M Hill / OMI also contract
to operate plant + collection system.

GNH personnel handle permits

15 year OMI contract expiring Jan 3, 2014
GNH to take back operations, except Syngro to perform maintenance.

GWH to take over:

- Sewer collector maintenance
 - Hot spots
 - Back up responses
 - Plus get help from a cleaning contractor
 - Being done by OMI now. Keeping most of the staff, but not all. Synagra will continue to run records " will be in charge of pump stations and plant.
- GWH will take over FOG/pre-treatment.
- most were OMI employees
 - many were city employees before that.

~~the~~

Treatment plant

29 MGD average

40 MGD max - secondary

Plans for 60 MGD bypass

Meet monthly average for 2nd day treatment, but not daily

plant upgrade from 100 to 187 MGD.

127 to enhanced primary only

60 through secondary.

Proposal included in LTCP update.

- 2011 Facilities Plan,
 Permit waves max daily.
 Sample pleated filter.
 560 miles of collection system.
 18 permitted CSOs
- Changing terminology
 - 24 regulators
 - permit contours regulators + outfalls.

North Branford is a customer

- service agreement.
- metered 12"-15" pipe.

No responsibility for:

- laterals
- storm drains, roadways
- park lands + public spaces

GWH takes ownership of laterals at the edge of the traveled way.

36" Ductile Iron Pipe

2 x 48" HDPE line runs installed ~ 2005 by DOT when bridge was moved.

CSO's and Regulators

- Deliberate at closed?
- Bullheaded ~~at~~ not connected,
- can't open w/o heavy construction.

Fluv monitoring

- tremendously helpful
- which regulates action / measure.
- Good is in outline at 2-year term.
- 6 regulators can be closed now.
- will maximize stage and conveyance along bordered interceptor along West River
- Design standards on closures. Engineering still reports.
- GNH owns 32 regulators. Contractors for NJ maintains and provide reports and data on a website. CSL.

Truman Tank project was more expensive than planned.

Concept of original LTCP was to install tanks at CSO locations.

2008 Model update and possibly LTCP. Reduced to six or seven tanks.

2009 Consent order - DEEP wants faster progress

Funding aspect has not been agreed upon, but facilities plan

Regional rate:

Came out of study initiated by the City of New Haven. Treatment plant as a utility. 2da - SOU. Allows the Authority to borrow on its own. Allows I/I in satellite towns to be addressed. Asset sale + agreement allows for long term savings. Rates have gone up significantly, allowed by disconnection of Authority from politics. Reorganization is popular now.

Maximize flow to the treatment plant as opposed to building tanks.

- Thurman tank done out of order b/c property was available.
- Future tanks would need to purchase property (middle of Yale)
- LTCP envisioned re-evaluation as you go.
- Thurman tank envisioned \$30M gal ended up costing \$23M
- Operations at tank initially were difficult. Bending was not located properly.
- Now, management of flows is automated.
- Model predicts 250 Mgal. ~~140~~ 140 Mgal - monthly.

LTCP

- two annual debentures:
 - begs of FY - Annual
 - beg. of CY - Construction
- when will LTCP be finished
 - o 2022.
- July 1, 2014 says CH2MHill to update model.

- to update LTCP by 2016
- 1-yr for model
- 1-yr for plan

Goal of ~~efficiency~~ was to estimate one flow for 2-yr storm. 1967 storm (typical) had an approximate 2-yr storm.

Are you asking the contractor to follow EPA guidance.

? No, b/c DEEP goals are more aggressive. GNH needs to negotiate w/ DEEP.

When GNH was begun, management + records were in poor shape.

- no standard details
 - no management system
 - poor GIS maps
- Now,
1. Concrete fees
 2. CMon
 3. Improved GIS
 4. Design criteria manual
 - integrated w/ CMMS management system.

I/I:

Hamden had started SES program
 taking advantage of DEEP loan
 program for long pipes.
 Contractor for repairs: "Fuchi".
 - long time (many contracts)
 - point repair contracts
 CMM program feeds repairs.
 Template contracts as a benefit
 of regionalization.

Construction of connections.

CCTV? no

GWH aspects.

Pamphlet for contractors.

EIL - program.

Ordinance refers to policy,
 which provides specific requirements.

Thoughtless abandonment of laterals.

Requirement for developers to match
 flow for 2-year storm.Lots of sandy, gravelly substrate
 - great for infiltration.Yale / Trumbull project sponsored
 WU access. R-014.Monitoring detected reverse flow of
 stormwater into combined sewer.

Asset Management

Pump ~~systems~~ Stations
 Flooded during stormsSome regionalization,
 \$82M spent

ESRI app.

Lyn: Langan - 3

Paved: Langan 3

GIS mapping "completed" about 2008.
 Web viewer information from
 asset management.

Live addition of conditions.

OMI mapping as contract is
 written for "cleaned footage"① Field crews have equipment -
 provided by GWH.Lately, fewer inspections b/c
 contract close-out.Supposed to clean every 3 years,
 in reality has been every 5 years.

Mapping updates?

Send an email to contractor
 with location and asset.

Contractor → Langan

CSL rejects regulations now.

NMEs not compiled into a report.

No floatable control structures.
(other than Truman tank).

Just borrowing copies & find, looky at a computer screen & find.

Sever ordinance has FOG rgs.
- refers to sewer use ordinance.

Pretreatment - state primary but GNH accepts applications and signs off.

OMB reports to GNH

Break

Collecta System master plan for separate sewers?

- Can't approve an expansion of the collection system.
- Developer must prove capacity exists.

- Legislature has to ^{approve} expansion of service collection area.

- Authority analyzes projects on a project-by-project basis.
- No need to expand service area.

Siphons

- eight
- failure near Morris Cove
- preparing to do a condition assessment and develop O&M procedures for siphons.

Fiscal year - July 1 - June 30.

No CSO treatment, no floatable controls, none planned. No recovery water collection of floatables.

GNH starts ownership of program at MWR.

Each CB cleaned once every 3 years.

CBs are hooded.

Also have reactive cleaning.

~ 2,700 CBs.

Cross connections between
Sanitary + Stormwater? no
Common manholes? no
Constructed SSDs? no

Asset management initiatives?

- At creation of the authority, interviewed all staff.
- Have detailed records of condition.
- CCTV done to NAASCO standards
- Require ~~the~~ capacity - testy for new developments
- COMOM program coordinates
- Where are you in your progress?
- Don't have info to have replacement expectation for each asset.
- Keeping up with asset renewal?
- Yes as of late, were caught up and are start thinking about the future.
- Can't just go by eye, Boulevard Interceptor is old (1970s) but in good shape
- Manhole inspection program should be useful.

- all assets identified in GIS.
 - try to get pro-active rather than reactive.
 - now, moving to assessment and preventative maintenance based on observations.
 - Plans to inspect entire system in four years.
- How much of system has been CCTV'd?
- OMI cleans ~~to~~ 75 m/yr.
 - ~~OMS~~
 - don't own CCTV equipment
 - CCTV done when pipes are lined.
 - Try by itself for a while and is self-funded.
 - Target CCTVing to areas that have problems. In computer
 - ~~is~~ w/ long efforts.
 - Long: mostly cur-in-place
- Cleaning
- Contract saved 3-year
Reality: 5-year
Did not include CCTV.
SOP for cleaning:
Setty. 2 curbside trucks, 1 super
super better.

Variety of approaches based on type of sewer.

Van to do manhole inspections.

Large diameter pipes right out he cleaned well - equipment made for smaller pipes.

No separate SOPs for large / small diameter sewers.

Boulevard = 102" x 68"

Most only up to 72" Ø.

Planning to do in the next 4 years:

- all large diameter
- 25% of small diameter manholes

To be prioritized by manhole inspections.

Previously prioritized by

- not been assessed as a
- probability of failure
- sediment depth
- velocity (flow full)
- number of SSOs.

Manhole inspections:

- checklist provided on tablet.
- take pictures
- condition notes
- PACP ratings for manholes and the length of pipe they can see.

- work orders generated as necessary.
- manholes made of brick, block.
- program in place since 2012
- this year have money allocated (\$150k) for manhole repairs.
- very few immediate repairs necessary.
- Have identified problems on pipes.

- if issues are seen with pole camera, then they bring in CCTV. Unless is so bad, they'll address immediately.
- 5 - immediate
- 4 - list
- 3, 2, 1 noted in file.

Company members have been NABSO certified. GWH has provided instructions of use of PACP to OMS staff.

Own 3 cameras.

Own trucks, but the OMS maintains.

Sediment depth determined by probe. Put PVC into manhole, w/ metal point inside. No man entry.

Hot spot cleaning.

- ~~no~~ det. data crew
- 3 x 2-man crews
- about half of each crew's time,
- 2 crews on ~~bank~~ trucks
- other crew maybe use one truck, manhole van, or jet truck.
- 8 - 4.00 shift
- About 1,000 - 1,500 LF / day cleaning.
- Hot spots cleaned Annual, some ~~5~~ - annual, some quarterly, some monthly, some weekly.
- Cleaned all prior to cold water
- 24.8 miles of hot spots.
- 96 segments of pipe. - ^{initial} ~~initial~~ ^{manholes}
- 300-500 ft per segment. ^{1/2} manholes
- 1,300 ft / segment
- OMI uses GWH's CMMS system.
- GWH uses CMMS to track contract compliance.
- Hot spots are not listed in the contract.
- Hot spots have been added through ~~not~~ ^{not} ~~additional~~ ^{additional} knowledge.

- Gog to have a contract to renew all hot spots to recommend corrective measures. Incentive to identify additional hot spots?
- More than 1/3 rts of SSOs since 2005 ~~have~~ occurred on hot spots.
- Permit violation. They are responsible for any resulting fines.
- Hot spots addressed in CIPs?
 - Yes, in East Haven & Hamden.
 - Some are addressed, but not systematically.
 - upcoming study will hopefully address.
 - worst problems are in neighborhoods w/ restaurants w/ flat sewers.
 - Study will be performed from Jan - April.
 - Problems mostly due to restaurants and flat sewers. Some roots in VC sewers in Hamden. Plan to line hot pipes.
- How do you manage emergency response contracts?

- Annual Contract w/ two extensions so far.
- Get calls from the city, public
- ~~GWH~~ Collector system crew does a manhole inspection.
- If can't tell, then TV.
- Message goes to Construction Coordinator
- ~~GWH~~ Contractor gets a permit from the city. Traffic Control. Fuchel knows city well and can manage work w/ city. What about fire emergency?
 - Can mobilize quickly
 - Haven't had a fire near facility
 - Can mobilize 30 people in hours to protect pump stations during Hurricane Sandy.
 - Contractor works very closely w/ Authority.
- Codes to use in CMMS?
 - Yes - skill-down menu
 - Resolve codes too.

Ponders Maintenance.

Pump Station O&M,

- two types of PM
 - o Station check
 - o PM tasks for maintenance activities (change oil, e.g.)
 - Staffly
 - O&M responsible for all costs of maintenance.
 - They make the decision.
- VerteQ compliance?
- use engineering company as a reviewer.
 - Staff reviews
- Documented?
- GWH staff will create a list of issues.
 - Monthly meeting b/w GWH + OMI.
 - OMI has not put GWH in violation, but has not always spent money how GWH would.
 - disputes w/ management one contract, but does not affect staff level work.

Full plant SCADA. \$1M project for all 30 pump stations. '07-'08.

Alarms.

Plant stalled 24/7. Yes
response time?

- 1 hour in contract.
- Condition assessment of pump stations by Malcolm Pirave.
- covered about 30% at pump stations.
- want to assess all pump stations.
- Have assessed all in last one year.

where do you stand on addressing problems identified?

- has been a problem w/ OMI,
- have been delay repairs as of later as they get "end" of their contract.

Going up to fix these things?

- will take ~~the~~ some issues up with OMI.
- just did bar racks.
- New contract will budget money for maintenance and give GMI more control.
- CMMS will measure contract success.
- Type + Band - Pump Station Standardized Report.

- Synagro contract gives them a year to take over maintenance.

Lunch 12:45 - 13:30

Kenn Dahl, CH2M Hill
John

Force Main assessment + Maintenance
- Man force mains have cathodic protection.

- other force mains
 - o bypasses installed to do maintenance
 - o GMI did a study, then hired a contractor
 - o set up bypass plans for each
 - o visual inspection of pipes.
 - o have not done pigging and electronic evaluations of pipe conditions.
 - o no ^{formal} program in place to create and maintain.
 - o have worked on highest critical force mains near DOT project
- no other force main facilities

AL

PL - need to check on release values.
 Res - putting together list of critical assets
 this FY.

Co

- GMI had considered this as
 part of OMI's responsibilities.
 Does the authority maintain sewer
 easements?

- when working on an easement,
 they do clearing of appropriate
 wetland permits.

- new project to actively
 maintain easement.

who

- CBYD program

Call before you dig

- ~~going to establish a list~~
 - easements on GIS system.

- hire a contractor to clear
 trails, etc.

Gen

- ~~the~~ major interceptors on
 Hamden run along streams.
 - Paradise Avenue easement
 runs below the reservoir.

I/I on top of manholes

Threat to line the reservoir
 early this year, but was not
 successful. Over 100K gal/day.

S

No immediate plans to address.

Combined Sewer Maintenance
 Prior to monitoring, performed
 block testing.
 Started 1999-2000.

Now, flow monitoring by CSL

- All active regulators are
 monitored.

- CSL has website to show data,
 shared at the end of the day.

O21 and O24 are
 at the main pump stations.
 Meters on by Jan 2013.

CSL Calibrates.

Monthly checks.

Depth and velocity meters.

Installed in flow.

99% at the time in service.

Problem at OOS. No GMI

inspections. Meter was installed
 in wrong location. ~~But~~

- GMI does not get an inspection
 report, but CSL has
 found problems.

- ~~August~~ August? OOS regulator
 fell apart. Discharged
 for two days.

CSO 012 Continued to discharge after a rain storm. CSE contacted GWH. I/I Raised near March 2013.

Deliver at dry weather flow?

- more than 6 hours after storm ends, but every regulator would be full vent.
- model does not allow that level at Detroit.
- did not report ~~for~~ March 2013 overflow to DEEP as a bypass.

Tide gates monitored. All are new.

- all ^{regulators} are above high tide, but some just barely, and ~~some~~ solar tides, storm & surges.
- CSO-003 doesn't have one, but had after dry study.
- monitoring is very complex
- met's helpful for finding contractor who plugged up combined sewer

Assessment of large pipes

- planning a study
- o will have post-cleaning CCTV

CB cleaning

- OMS was doing it from 2005-2008
- Since 2008, CATy took over.

Street sweeping

- CATy has always done it
- info on their website
- CATy uses sand + salt for deicing.

Dry weather CSOs

- none reported since July 2011.

Collection system wet-weather SOPS?

- no
- Thurman Storage Tank played
- doing wet wells in anticipation of wet weather? no

Industrial User controls?

- ground water / denitrifying Comtalsms during wet weather.

- no limits through the JRP program.

Characteristics of discharges?

- no
- Nine Minimum Controls plan?
- as part of LTCP, there is a list of practices.
- not currently tracked
- separate document from LTCP [?]

Emergency Response Plan.

- Call center is at treatment plant
- call comes into the front desk
- entry to CMMS - CMMS number
- crew is dispatched, even after business hours. work order # is created. Same as CMMS number.
- CMMS is called "Maintenance Connection".
- more calls in wet weather.
- 20-30 calls / month
- April = 200 calls
- Comments section filled out by the operator.
- answering service is a back-up.
- On duty 24-7.

- Answering service gets name, return phone #, complaint, address. They then relay this info to the plant. They keep files on the address also.
- Answering service calls operator's cell phone & they can't get the other phone.
- Operator calls lead collection operator, who will then assemble a crew. If lead is off-duty, a designee is assigned.
- 1-hour response time goal
- Very successful at meeting response time goal.
- Crew makes a field estimate of volume.
- DEEP form.
- Call DEEP within 2 hours
- SOP Training annually.
- minimum size? no
- planned bypasses, even photographs? sometimes.
- Only when damage occurs.

- cleanups?
 - o bucket, wash, line.
 - o basement disinfection by contractor.
 - incident report / claim form for homeowners.
 - o reimburse
 - less than one basement backup per month
 - reporting basement backups
 - say that most backups are in laterals.
- [records seem to indicate that few backups reported are in laterals]
- bypasses w/ cleanups by Pro Clean generally are backups in ~~at~~ main line.

Process for looking for cross connections when basement backups occur.

- no
- look for non-permitted bathroom fixtures when a finished basement drain is tied.

Tomorrow:

~~CSO~~ CSO-031

Complaint from Rosa Delora
Air Rights Garage.

DOT right of way

CSO had been documented as closed.

Citizen came to explain a problem. August 15 storm. 100-year, 15-minute intensity.

GVH investigated, found that the regulator was open.

Separated system connected ~~to~~ to storm sewer substantially (root leaders)

It may have been bulkheaded at one point.

GVH does not have detailed information on the garage storm drains.

City would Cardinal to review drainage system.

Drainage system is flooding the garage.

Closed a couple of months ago. It was explained that the stormwater flows into the sewer.

not the other way around.
 - Can't find a work order
 confirming that cross-connection
 was closed in 2008.

560 ~~564~~-
 573 - 3041

Recovery documents
 left at 17:00

Discussion with Britta -
 west side Boulevard intercept
 not currently used for
 storage. plans to do
 this in the future.
 Failure to mitigate?

San Antonio waste water CD
 - based on assessment
 for ~~water~~ clearing.

Summary of
 Notes from Day 1

Preventive Maintenance

Use at manhole inspections
 does not seem sufficient
 to understand condition of
 pipes and to prioritize
 repairs. Only since 2012.

No system for clearing large
 diameter pipes.

FOG enforcement Pretreatment

Currently, no incentive to eliminate
 Hot Spots.

Don't have control over pump
 station PM.

MP review only covered about
 30%.

Have not resolved problems identified.

No PM program for force
 mains or siphons.
 - Failure at Morris Canal

No Portables control

No Regulatory requirements
Dry weather allow

12/17/13

Anne @ WPCF @ 08:00.

Rich

Not much water getting today w/c w
weather. Work in shop.

Rock Hurlburt

Collection Systems Superintendent

CMMS

Back log query

Organized by department

- maintenance (pump stations & plant)
- collections (sewer lines)
- engineering
- IPP (not used)
- operations (plant)

GIS updated into CMMS personally.

Follow-up work order ^{can} demonstrate
how PM ends up in improvements

Work orders appear to still be open.

- Open backups from 2011.

460 Main St. ~~Dr.~~ Duplicate?
330 open orders in one division.
Lateral blockage

Prioritization set by default to
the priority of the asset.

1 - ASAP

5 - 30 days

Work orders coded w/ asset ID.

Backups that go to court may
stay open for years.

Initial response within 1 hour.

Investigation of claim happens
when Rich calls Rock. Rich
takes photos, etc.

Migrated

OMI used MP2.

GMH adopted ~~2010~~ current system
in 2010 and OMI migrated
to files to new system.

Field crews get a map and
talk to Rich.

Try to determine the volume to
last they can.

Verbally communicate work to

Rich. Rich does reports to DEEP.
Crews do not have field worksheets.

Call Pro-Clean to get basements cleaned.

Does phone call w/in 2 hours, Anthony does faxing.

Work crews dispatching

- morning meeting to discuss issues
- generally all 3 crews are doing cleaning.
- if a backup is called, one crew will be diverted immediately.

Sufficient resources? Yes.

- crews make a paper map in the office.

If emergency?

- Someone from the office can meet them at the site.

Looking for records at closing of CSO-031

- found 3
- none are closed

Collection SOPs?

- Am that has some demonstrations... not sure which ones.

Anthony

Try to better understand open work orders in the Collections Division: "All open requests".

Shop: OMI

Rock keeps work order open s/c they are investigating.

Field work is done under OMI shop.

Investigations done by GMH.

Can search work order system by asset to find closed order to clear blockage? - no

Standardized procedures to enter info?

- Call center people go by address
- work order for backup response incorrectly coded for GMH.

CMMS used for cost tracking?

- cleaning company costs tracked

Used for improving PM? Search by location?

Ops desk gets a call

Only when the backup is in

the main line does GMH call

Pro-Clean.

Rock informs

see B 176

New Bar screens.

4 grit chambers
~~two~~ ~~one~~ under repair. Been
 down on and off over
 a couple of years.

Constantly under maintenance.
 Sedimentation along back wall
 that gets flushed into grit
 chambers.

Any plans for improvements?

~~Right under way~~

Replacement is in long-term plan.

Lots of rgs on floor. Riddles

Dry dry weather, two grits
 skinned, one bar screen.
 Floor cleaned twice a week.
 Normally cleaner than at present.

Auxiliary power for water station.

All four pumps on line.
 not well?

Level control? Meters? - Gunthers
 - working wells - High, Low, CSO
 activation

Generator, 1.3 MW. Run once per week.

Logs kept in "Tour sheet".

Hours get written on Tour sheet, then
 into CMMS.

Usually start w/o load.
 Last used in Sandy, before that
 in Irene.

Sandy - October 2012

Irene -

~~then~~

Central Electric does annual maintenance.
 weekly - ~~stop~~ shut generator, let it
 get up to temperature, then shut down.
 Track hours?

Turbine. Still has original oil.
 Not sure if oil filters have
 been changed.

Regulator 021

Outfall 021

Chris -
 Scotter - pumps + plant
 Kevin - CH2M Hill

East St Pump Station.
 - Safety Barrel. Fixed an
 mounting. Scotter
 * Improving bar screens
 High Voltage.



1200 Circular Ave.
 - Observe field crew responding
 to a blockage.
 - Call from Brundage Community
 Band Library.

Jetted upstream from
 #1 on front of weir here.

13:00 Boulevard Pump Station.
 Similar setup to East St.
 Contractors installing new bar racks
 and grit screens.
 GMA hires contractor
 \$1M for 4.

Bypass components of pump station?
 - none here
 - at East St, can bypass screen,
 Near, but not at location
 Generator: Synchronous AC Generator
 Magna Max Generator
 PM.
 Beginning of week - exercise Generator
 End of week

Documentation at negatives same as
 East St.
 Spill kit
 - mats present
 Generator Kawasaki engine.
 Tanks: 2 x 4,000 gal diesel.
 Facility is clean.
 Load where p from pump motors
 One pump operating from Wetwell 2.
 Pump 2. 6.6 MGD.

Grit chamber, bar screens
 Floor is dirty and wet
 Bar screen #4 is on, the rest
 are off.
 If grit removal is overwhelmed, A

overflows into the wet well,
and then gets pumped to the
treatment plant.

024. Boulevard Interceptor

Thuman tank?

no redundancy

Thuman Station

Clean every two years
at full O/S. Three weir heights.

031

034

Overflow from down into
concrete sewer
wooden stop log weir.

12/18/13 08:00

Craig gave us the Service Request
list from the call center.

Thuman Tank, no quick connect.

Cardinal Study addresses

flow problems from O-25.
\$60 M solution.

Overview of observations
to Gabe, Brad Bruce, and Gary.

E. St. Pump Station,

Grit falls on the floor.

No automatic controls. So turn on.

Overflow @ Thuman?

003 in overflow

No backup power hookup.

No weather plan ↑

034

Try to determine capacity
for 2-year storm

Outlet of the drainage system
totally influenced

GMH Comments on the P6
Report. GMH will want to
provide a response.

GMH wants to show that they
know about issues and are
working to address them.

Still need documentation of pump
station assessments.

- 13 of 30 pump stations don't have on-site backup.
- Have 3 portable generators and 2 trailer-mounted pumps
- SOPs regarding operation of pumps
 - Emergency Response Plan
- Documentation of Hot Spot cleaning most prior to the SSOs investigated.
- SOPs for collection system cleaning, maintaining, etc.?
- Training? written curriculum and records?
 - Corporate training
- Were they more at O&M training on SOPs.
- Collection system maintenance form? Map shown. Others?
 - work orders
- Wet weather operating plans?
- Some Ordinance for FOG
- FOG program manual and implementation field inspection form
- Scranton - Referral a/leges follow to implement NMCs w/o reliance to a permit requirement.

Count Reported SSOs by
Muni:

Hamden 2012
1/3/2012
1/8
2/12
2/16
3/26
2 + 11 = 13

Hamden 2013: 12

East Haven 2013: 9

none b/w April and June and Dec.

E. Haven 2012: 12

Woodbridge 2012: 1

" 2013: 0

New Haven 2012: 1 planned

18 (includes 1 dry weather bypass)
" 1 surge system failure)

New Haven 2013

13 (includes 1 dry weather bypass)

Dry weather overflow CSO #009

CSO discharge from

1/25/13 - 1/26/13

1/10/12

Not reported to DEEP

164 SE

Stacy
NMCs

Send Stacy PQR from fall 2013.

Rock interview:

Process of report 550.

If crew observes a problem,
Rock will send Pro-Clean and
report to DEEP if necessary.
Will send Rock if property damage
is reported.

Crew will report freely, usually.

Sometimes, they are chaste.

Time is when crew responds
and determines it is ~~the~~ the
city's fault

Only issue ^{report} for a private problem
unless there is an egregious
issue.

Planned bypasses have a defined
form.

Ext brief at 13:20

Go through the findings and
then allow you to make comments.
You can comment on the
report.

Not going to go through specific
evidence

Not a determination of compliance.

Will offer you an opportunity
to comment at the end.Limit to offering additional documents
to pertinent order.OLMDid not observe any formal
training program documentation.

-records, syllabuses

Found a general lack of SOPs
for Collection System Activities.

Found the written OLM manual
was not being followed, (eg CS
cleaning + regulator inspection)

Lack of written records from
collection system crews.

Lack of procedures/documents/
training on hot spot identification,
removal.

Lack of equipment maintenance
program.

Ineffective use of CMMS relating
numerous open work orders +
inability to retrieve requested info.

Lack of base domestic cleaning program

Concerns about cleaning procedures
for sewer lines.

Concern about condition of pump
stations.

Concern about level of redundancy
including pump backups at critical
systems.

Reporting

Found unauthorized discharges from
Collection System

Found evidence of possible dry-
weather overflows from CS.

SSOs not reported within 2-hour
time frame.

Cases where SSOs not reported
(e.g. 2011 - 7 of 17 reported SSOs

in Hamilton reported before 2
-hours)

(e.g. New Haven:
Potential unreported SSOs in Customer
Service requests.

SSO Response

Emergency response procedures not
being implemented

No training on emergency response
in particular volume estimation.

Responders were not familiar
w/ emergency response procedures.

Responses were not documentary
responses in writing.

Customer service calls was
written on a scrap paper and then
discarded.

Written call center SOPs were
not being followed.

Time of call was not being
recorded, so time of response
time could not be measured.

Responding crews were not
following SSO response procedures.

Planning + Assessment of Collection System

- No consistent system for asset renewal

Lack of an active Nine Mile Run Controls Program

- No policy or definition of what qualifies as a dry-weather overflow event.
- Lack of maintenance, including CSO regulators
- Flow to POTW was not being maximized.
- Lack of a floatable control program
- anomalies with designation / eliminate / or changes in designation within time frame or permit.

Good stuff

- mapping
- CMMS

Gang
Collection System SURS

Tom

Asset management and planning
w/er reports and funding

Rock

Hot spots are marked in CMMS
and are shown in GIS.

June

Format of draft report

Thank for doing the follow up.

2-3 months for final report.